CHAPTER 1.8 - Enforcement Strategy

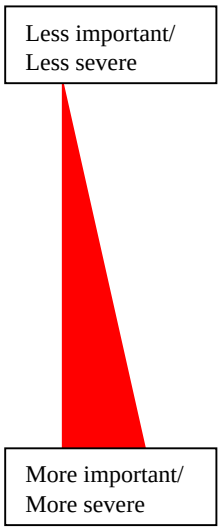
The purpose of this chapter is to give example enforcement situations related to WET requirements and to discuss appropriate responses to WET violations.

NOTICE: This document is intended solely as guidance, and does not contain any mandatory requirements except where requirements found in statute or administrative rule are referenced. This guidance does not establish or affect legal rights or obligations, and is not finally determinative of any of the issues addressed. This guidance does not create any rights enforceable by any party in litigation with the State of Wisconsin or the Department of Natural Resources. Any regulatory decisions made by the Department of Natural Resources in any matter addressed by this guidance will be made by applying the governing statutes and administrative rules to the relevant facts.

WET LIMIT VIOLATIONS

Many WPDES permits contain language requiring whole effluent toxicity (WET) monitoring to be conducted and providing specific follow up actions in the event of a test failure. Typically, two follow up tests must be performed within 90 days of the failure. Inclusion of such language in a permit does not constitute an effluent limit and thus an effluent violation does not occur with a test failure under these circumstances. However, in certain instances such as after repeated test failures, inability or unwillingness to address toxicity issues, and/or a clear potential for impact to the receiving water fish and aquatic life community, a WET limit may be included in the permit (see Ch 1.3 for a discussion of when WET limits are given). If a test failure occurs when a WET limit is in effect, than a permit violation has occurred. Permit violations can also occur if WET Test Report Forms are not submitted according to specified timelines, if tests or retests are not done at all, or if other required follow up actions are not taken.

Listed below are examples of noncompliance that staff may face when dealing with WET requirements. The list provides examples of noncompliance, but also gives a framework to identify the continuum of noncompliance from less important/less severe problems to more important/more severe problems. Please note that the list is not all-inclusive and that additional types of noncompliance may exist and should not limit an enforcement response.



- Monitoring only required, WET failure occurred **(<u>not</u> a violation if no WET limit is present)**
- Monitoring and/or limit required, test completed but WET Test Report Form not submitted w/in 45 days
- Monitoring and/or limit required, 2 retests completed but results not submitted within 90 days
- Monitoring only required, WET tests not completed
- WET tests not conducted by a certified lab as required by NR 149.22, Wis. Adm. Code.
- Monitoring only required, 2 retests not completed after failure has occurred
- Failure to follow WET test methods required in WPDES permit
- WET limit in permit, WET tests not completed
- WET limit in permit, 2 retests not completed after failure has occurred
- WET limit in permit, TRE information not submitted within 30 days of violation as required in "*Exceedance of a WET Limit*" standard condition (see below)
- WET limit in permit, WET tests completed, failure occurred
- WET failure indicates magnitude of toxicity is slight and potential is lower for an environmental impact
- WET failure is an isolated incident; permittee does not have a history of WET failures
- WET failure indicates magnitude of toxicity is severe and potential is greater for an environmental impact
- WET failure is <u>not</u> an isolated incident; there is a history of frequent or severe WET failures

PERSISTENCE AND SEVERITY OF TOXICITY

WET limits appear in the effluent limits table of a permit as 1.0 TU_a (acute) or 1.0 rTU_c (chronic). Toxic Units (TU) are calculated as follows (see Chap. 2.4 for a more detailed discussion of test endpoints and TUs):

- **Acute Toxic Unit (TU_a) = 100/LC_{50}**; the LC_{50} is the effluent concentration at which 50% of organisms die.
- **Relative Chronic Toxic Unit (rTU_c) = IWC/IC_{25}**; the IC_{25} is the effluent concentration at which 25% of organisms are

inhibited (growth or reproduction are suppressed).

The severity (or magnitude) of toxicity expressed in the test can be determined by looking at the LC_{50} / IC_{25} or the TU_a / rTU_c values. The lower the LC_{50} or IC_{25}, the more severe the toxicity; the higher the TU_a or rTU_c, the more severe the toxicity. Tests showing severe toxicity indicate a higher potential for adverse impacts to aquatic life. The same can be true for repeated bouts of less severe toxicity. Therefore, more severe toxicity and repeated bouts of toxicity should be considered seriously and given more weight than single and/or less severe events.

RESPONSES TO WET VIOLATIONS

It is recommended that all WET limit violations be taken very seriously. WET monitoring is relatively infrequent (usually quarterly when a limit is effective), therefore individual results should be given more weight. WET limits are usually only given in situations where the effluent has shown past toxicity or where sensitive conditions exist. In addition, the test itself is intended to directly measure the potential for impairment of fish and aquatic life communities related to substances present at toxic concentrations. Thus, all WET test failures indicate some potential for adverse impacts to the aquatic life community in the receiving water and appropriate action should be taken. As discussed above, more severe and repeated toxicity should be given more weight than single toxic events.

In addition to the standard 2 retest requirement, additional follow up is needed in the event of a WET failure when a WET limit is present in the permit. According to the "*Exceedance of a WET Limit*" standard condition:

In the event of a WET limit exceedance, the permittee shall submit the following (within 30 days of test end):

- *the findings of a toxicity reduction evaluation (TRE) or other investigation to identify the cause(s) of the toxicity;*
- *actions the permittee has taken or will take to mitigate the impact of the discharge, to correct the noncompliance, and to prevent the recurrence of toxicity;*
- *where corrective actions including a TRE have not been completed, an expeditious schedule under which corrective actions will be implemented; and*
- *if no actions have been taken, the reason for not taking action.*

Follow up on violations should be in accordance with the stepped enforcement procedures outlined in the Environmental Enforcement handbook and the guidance document titled, "*Enforcement Strategy For The Wisconsin Department Of Natural Resources Water Pollution Control Program"*. At a minimum, a notice-of-violation (NOV) should be sent to the permittee after a single violation. Additional or more severe action may be warranted if repeated or severe violations have occurred or if the permittee has not taken the required investigative steps, as discussed above. WET violations combined with other parameters such as BOD or metals may prompt a more aggressive follow up.

The Biomonitoring Coordinator can provide assistance and should be notified whenever enforcement action is deemed necessary. In cases where the situation may be controversial, repeated violations have occurred, or other non-standard conditions exist, it may be necessary to convene an interdepartmental team, including the Biomonitoring Coordinator, Regional staff, supervisors, and/or others to determine necessary actions. The Department's response to WET limit violations should be based on the site-specific circumstances involved. Ultimately, decisions on enforcement steps to be taken should be made on a case-by-case basis, with input from the Biomonitoring Coordinator, regional, and permits staff most familiar with the facility.

INSPECTIONS AND SUPPLEMENTAL WET MONITORING

Whole effluent toxicity information should be collected and problems discussed with permittees during compliance inspections. For situations where field staff suspect problems may exist or when staff feel it is appropriate to supplement monitoring that is being conducted by the permittee's private lab, the UW-Madison State Lab of Hygiene (SLH) Biomonitoring Laboratory is available for testing. WET tests may be conducted by the SLH at the request of DNR staff and used to determine whether a problem exists or to generate additional data for use in WET determinations, but **cannot** be used as a replacement or credit towards permit-required testing. The SLH serves as a source of research, technical expertise, and WET compliance inspection testing for the Department. Staff may contact the Biomonitoring Coordinator or the SLH (608-224-6230) to request a toxicity test.

WET FILES

The Methods Manual requires WET Test Report Forms be sent directly to the Biomonitoring Coordinator in Madison within 45 days of test end. Upon receipt at the central office, forms are date-stamped and reviewed as soon as possible. (For details regarding the Biomonitoring Coordinator's review process, see Chapter 1.5 of this document.) After a complete data review, the Biomonitoring Coordinator confirms whether the test passed or failed, enters test information into the SWAMP WET database, and sends copies to the appropriate field and permits staff for comparison to permit conditions and filing in the permit file. WET Test Report Forms and all other information collected by the Biomonitoring Coordinator for a given facility (e.g., TRE plans and reports, face-to-face meeting and phone discussion summaries, WET Checklist summaries, etc.) are placed into the "WET file" for the facility, which is kept along with the permit file in the central office in Madison. In almost every case more detailed, WET-related information will be included in this WET file than in the regional permit file for the given facility. Field staff may contact the Biomonitoring Coordinator for copies or to discuss the information contained in the WET file.